**Application No.:** 10/088,323

Office Action Dated: March 29, 2004

This listing of claims will replace all prior versions, and listings, of claims in the application.

**Listing of Claims:** 

1-180. (canceled)

181. (new) An adjustable arm assembly attachable at one end to a suitable vehicle

and capable of deployment substantially orthogonally to the direction of movement of said

vehicle; said arm being elongated and including two or more articulatedly connected sections

and one or more actuators capable of changing the orientation of at least two said sections

with respect to each other; a lower or outer surface of at least one said section forming two

substantially coplanar working surfaces; and a conveyor arranged to be driven in one

direction along one said working surface and in the opposite direction along the second said

working surface, said conveyor being provided with at least one tool adapted for interaction

with a terrain surface.

182. (new) The adjustable arm assembly of claim 181, wherein the lower or outer

surfaces of two or more said sections form continuous working surfaces.

183. (new) The adjustable arm assembly of claim 182, wherein said working surfaces

of each section may be longitudinally curved or straight in the vertical plane.

184. (new) The adjustable arm assembly of claim 183, wherein two or more of said

working surfaces are of different lengths longitudinally or laterally.

185. (new) The adjustable arm assembly of claim 184, wherein the longitudinal

curvature of each working surface can be altered in the vertical plane by said actuators.

186. (new) The adjustable arm assembly of claim 181, wherein each actuator is

capable of altering an angle between adjacent sections to coil the arm assembly for transport

or storage and to uncoil the arm assembly for use.

**Application No.:** 10/088,323

Office Action Dated: March 29, 2004

187. (new) The adjustable arm assembly of claim 186, wherein said actuators are

attached between adjacent sections and between an attached end of said arm and a vehicle

mounting assembly.

188. (new) The adjustable arm assembly of claim 187, wherein separate conveyors

are provided for each section.

189. (new) The adjustable arm assembly of claim 188, wherein each conveyor is

separately provided with at least one drive.

190. (new) The adjustable arm assembly of claim 189, wherein said conveyor is

constrained by a slotted track on each working surface with each tool projecting outwardly

from said track.

191. (new) The adjustable arm assembly of claim 190, wherein said conveyor is

constrained to move within a closed path and around at least two direction-changing devices.

192. (new) The adjustable arm assembly of claim 191, wherein at least one said

direction-changing device is a drive.

193. (new) The adjustable arm assembly of claim 192, wherein at least one section is

formed from two sub-units which may be pivoted with respect to each other about a mutual

pivot axis orthogonal to the direction of movement of said vehicle.

194. (new) The adjustable arm assembly of claim 193, wherein the vertical elevation

of the portion of the conveyor along one longitudinal edge with respect to the portion of the

conveyor along the opposing longitudinal edge is adjustable by pivoting said sub-units about

said mutual pivot axis.

195. (new) The adjustable arm assembly of claim 191, wherein portions of said

conveyor intermediate said direction-changing devices are substantially parallel and extend

substantially along opposing longitudinal edges of said working surfaces.

Page 3 of 10

**Application No.:** 10/088,323

Office Action Dated: March 29, 2004

196. (new) The adjustable arm assembly of claim 195, wherein said portion of the conveyor along one longitudinal edge of at least one working surface is vertically elevated with respect to said portion of the conveyor along the opposing longitudinal edge of the

opposing working surface.

197. (new) The adjustable arm assembly of claim 196, wherein the vertical elevation

of the portion of the conveyor along one longitudinal edge with respect to the portion of the

conveyor along the opposing longitudinal edge is adjustable.

198. (new) The adjustable arm assembly of claim 197, wherein the vertical elevation

is adjustable by pivoting the arm assembly about a horizontal axis co-planar with a

longitudinal axis of the arm assembly.

199. (new) The adjustable arm assembly of claim 197 or claim 198, wherein the

vertical elevation is adjustable by pivoting or height adjusting at least one of the direction-

changing devices.

200. (new) The adjustable arm assembly of claim 181, wherein said conveyor is

selected from the group consisting of a chain, a belt, a rope, a wire and a hawser.

201. (new) The adjustable arm assembly of claim 181, wherein said tool is adapted

for cutting, scraping, pushing, packing, smoothing or rolling said terrain surface.

202. (new) The adjustable arm assembly of claim 181, wherein said terrain surface

includes snow, ice, sand, soil, mud, building debris, grass, crops, undergrowth, coal,

aggregate, or particulate substances.

203. (new) The adjustable arm assembly of claim 181, wherein the at least one tool is

selected from the group consisting of a paddle, a scraping element, a rasping element, a cutter

shaft, a spiral cutter, a brushing roller, and a pick-up roller.

204. (new) The adjustable arm assembly of claim 181, wherein the at least one tool is

rotatably mounted.

Page 4 of 10

PATENT

**DOCKET NO.:** PLBA-0004 **Application No.:** 10/088,323

Office Action Dated: March 29, 2004

205. (new) The adjustable arm assembly of claim 181, wherein said arm assembly is pivotably attachable to said vehicle about a vertical axis, enabling each section to be pivoted

for deployment on either side of said vehicle.

206. (new) The adjustable arm assembly of claim 181, wherein said arm assembly

may be moved in a vertical plane.

207. (new) The adjustable arm assembly of claim 181, wherein said arm assembly

may be moved transversely to the direction of movement of the vehicle.

208. (new) The adjustable arm assembly of claim 181, wherein the arm assembly

may be at least partially rotated about an axis in a horizontal plane.

209. (new) The adjustable arm assembly of claim 181, wherein one or more

supporting devices are located at predetermined fixed positions about one or more working

surfaces.

210. (new) The adjustable arm assembly of claim 209, wherein said predetermined

fixed positions include longitudinal edges of said working surfaces or between said working

surfaces.

211. (new) The adjustable arm assembly of claim 210, wherein at least two of said

supporting devices are laterally offset with respect to each other.

212. (new) The adjustable arm assembly of claim 211, wherein one or more of the

supporting devices are formed as the tool.

213. (new) The adjustable arm assembly of claim 212, wherein one or more of the

supporting devices are configured to contact the terrain surface during use to thereby provide

support by transferring at least a portion of the arm assembly weight to the terrain surface.

214. (new) The adjustable arm assembly of claim 181, wherein at least one section is

independently pivotable with respect to an adjacent section about an axis orthogonal to a

direction of movement of the arm assembly when deployed and in use.

Page 5 of 10

**Application No.:** 10/088,323

Office Action Dated: March 29, 2004

215. (new) The adjustable arm assembly of claim 181, wherein one or more flexible

grooming elements may be affixed to a longitudinal edge of one or more working surfaces

facing away from the direction of movement of said vehicle, and are configured such that a

trailing edge of each grooming element is wiped across an adjacent terrain surface when in

use.

216. (new) The adjustable arm assembly of claim 215, wherein said grooming

elements are detachable.

217. (new) The adjustable arm assembly of claim 216, wherein said grooming

elements are movable between an in-use position and a stand by position, whereby said

grooming elements are retained in the stand-by position, out of contact with the terrain

surface.

218. (new) The adjustable arm assembly of claim 217, wherein said grooming

elements are located along opposing longitudinal edges of said working surfaces.

219. (new) The adjustable arm assembly of claim 181, wherein said arm assembly is

integrally attached to said vehicle.

220. (new) The adjustable arm assembly of claim 181, wherein said arm assembly is

pivotably attachable to said vehicle by a detachable vehicle mounting assembly.

221. (new) The adjustable arm assembly of claim 181, wherein the at least one tool is

hinged to move freely in one direction along a longitudinal axis of the sections, but is fixed in

the reciprocal direction.

222. (new) The adjustable arm assembly as of claim 181, wherein the at least one tool

is hinged to move freely in one direction orthogonal to a longitudinal axis of the sections, but

is fixed in the reciprocal direction.

223. (new) The adjustable arm assembly of claim 181, wherein said conveyor is

capable of bi-directional movement.

Page 6 of 10

**Application No.:** 10/088,323

Office Action Dated: March 29, 2004

224. (new) The adjustable arm assembly of claim 181 or claim 220, in combination with a snow grooming machine.